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FOR THE COMMANDER

Hugh L. Southall, Lt. Col., USAF

Chief, ESD Lincoln Laboratory Project Office

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FOREWORD

Volume 17 of Unclassified Publications of Lincoln Laboratory lists reports published from 1 January to 31 December 1991, as well as updated information on earlier publications.

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6441	1/f Frequency Noise Effects on Self-Heterodyne Linewidth Measurements	Mercer, L.B.	J. Lightwave Technol., Vol. 9, No. 4, April 1991, pp. 485-493
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6454	Dynamic Suppression of Interface-State Dark Current in Buried-Channel CCD's	Burke, B.E. Gajar, S.A.	IEEE Trans. Electron Devices, Vol. 38, No. 2, February 1991, pp. 285-290 ADA235496

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6550	Frequency-Modulated Nd:YAG Laser	Schulz, P.A. Henion, S.R.	Opt. Lett., Vol. 16, No. 8, 15 April 1991, pp. 578-580 ADA237824
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6582	Visual Learning, Adaptive Expectations, and Behavioral Conditioning of the Mobile Robot MAVIN	Baloch, A.A. Waxman, A.M.	Neural Netw., Vol. 4, No. 3, 1991, pp. 271-302
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6623	Polarization-Switchable Microchip Lasers	Zayhowski, J.J.	Appl. Phys. Lett., Vol. 58, No. 24, 17 June 1991, pp. 2746-2748 ADA241443
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6631	High-Speed Optical Interconnections for Digital Systems	Tsang, D.Z.	Linc. Lab. J., Vol. 4, No. 1, Spring 1991, pp. 31-44 ADA237820

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6720	The Early History of Reentry Physics Research at Lincoln Laboratory	Sullivan, L.J.	Linc. Lab. J., Vol. 4, No. 2, Summer 1991, pp. 113-132
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8435	Adaptive Nulling of Omni-directional Blanking Channel	Pohlig, S.C.	Proc. Twenty-Third Asilomar Conf. on Signals, Systems and Computers, Vol. 1, 30 October - 1 November 1989, pp. 64-68
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8511A	Artificial Satellites as Ground- Truth Objects for IOTA (Infrared-Optical Telescope Array)	Gibson, D.M.	SPIE, Vol. 1237, Amplitude and intensity Spatial Interferometry, 14-16 February 1990, pp. 166-171 ADA230789
8514	Preparation of YBa ₂ Cu ₃ O _x Thin Films by Multisource Deposition	Bhushan, M.	Advances in Cryogenic Engineering (Materials), Vol. 36, PT. A, 1990, pp. 453-459
8532	A Comparison of the Link Performance of Directly and Externally Modulated Analog Fiber-Optic Links	Cox, C.H., III Betts, G.E. Johnson, L.M.	Proc. 20th European Microwave Conf. 90, Vol. 1, 10-13 September 1990, pp. 682-686

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8655	Thermal Guiding in Microchip Lasers	Zayhowski, J.J.	Proc. Advanced Solid State Lasers Mtg., 5-7 March 1990, pp. 9-13 ADA241387
8657B	An Optoelectronically Implemented Neural Network for Early Visual Processing	Mehanian, C. Aull, B.F. Nichols, K.B.	SPIE, Vol. 1469, Applications of Artificial Neural Networks II, 2-5 April 1991, pp. 275-280
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8873B	Massively Parallel Image Restoration	Menon, M.M.	SPIE, Vol. 1471, Automatic Object Recognition, 3-5 April 1991, pp. 185-190
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8849	Appearance-Model-Based Representation and Matching of 3-D Objects	Verly, J.G. Delanoy, R.L.	Proc. Third Int. Conf. on Computer Vision, 4-7 December 1990, pp. 248-256
8854	Analysis of the Potential Benefits of Terminal Air Traffic Control Automation (TATCA)	Boswell, S.B. Andrews, J.W. Welch, J.D.	Proc. 1990 American Control Conf., 23-25 May 1990, Vol. 1, pp. 535-542
8859	Comparison of GPS and Incoherent Scatter Measurements of the Total Electron Content	Coster, A.J. Gaposchkin, E.M. Thornton, L.E. Buonsanto, M.J. Tetenbaum, D.	The Effect of the Ionosphere on Radiowave Signals and Systems Performance Based on Ionospheric Effects Symp., 1-3 May 1990, pp. 460-469
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8878	Linearization of an Interferometric Modulator at Microwave Frequencies by Polarization Mixing	Johnson, L.M. Roussell, H.V.	IEEE Photon. Technol. Lett., Vol. 2, No. 11, November 1990, pp. 810-811 ADA231489
8881	Normal-State Resistivity Diagnostic for High-T _c Superconductors	Dionne, G.F.	IEEE Trans. Magn., Vol. 27, No. 2, March 1991, pp. 1190-1193 ADA235442
8884	Low Noise dc SQUIDs Fabricated in Nb-A1 ₂ O ₃ -Nb Trilayer Technology	Ketchem, M.B. Bhushan, M. Kaplan, S.B. Gallagher, W.J.	IEEE Trans. Magn., Vol. 27, No. 2, March 1991, pp. 3005-3008

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8888	Off-Axis Magnetron Sputtering of YBCO Films: The Influence of Atomic Oxygen	Westerheim, A.C. Yu-Jahnes, L-S. Anderson, A.C.	IEEE Trans. Magn., Vol. 27, No. 2, March 1991, pp. 1001-1005 ADA235451
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8890	High-T _c Superconductive Delay Line Structures and Signal Conditioning Networks	Lyons, W.G. Withers, R.S. Hamm, J.M. Anderson, A.C. Mankiewich, P.M. O'Malley, M.L. Howard, R.E.	IEEE Trans. Magn., Vol. 27, No. 2, March 1991, pp. 2932-2935 ADA235467
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8902	Application of Frequency- Domain Analysis to RHEED Oscillation Data: Time Depen- dence of AlGaAs Growth Rates	Turner, G.W. Eglash, S.J.	J. Cryst. Growth III, 1991, pp. 105-109 ADA241392

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8920	Planning Horizon Requirements for Automated Terminal Scheduling	Vandevenne, H.F. Andrews, J.W. Welch, J.D.	Proc. 35th Annual Air Traffic Control Association Mtg., 16-20 September 1990, pp. 438-451
8925	High-Dynamic-Range, Low-Noise Analog Optical Links Using External Modulators: Analysis and Demonstration	Betts, G.E. Johnson, L.M. Cox, C.H., III	SPIE, Vol. 1371, High-Frequency Analog Fiber Optic Systems, 17-18 September 1990, pp. 252-257
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8930	Resistivity of Multiphase High-T _c Superconductors	Dionne, G.F.	J. Appl. Phys., Vol. 69, No. 8, PT. IIA, 15 April 1991, pp. 4883-4885
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